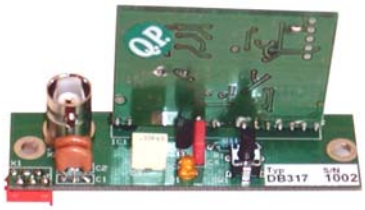
Radio receivers
type DB317 and DBR1-M4

User manual
Edition 5



Technical data	DB317	DBR1-M4
Dimensions (WxHxD)	45x75x21 mm	80x80x50 mm
Supply Voltage	via control panel	12/24 VAC/VDC
Current Consumption	max 11mA	max 41 mA
Temperature range	0 to 50°C	-20 to +70°C
Status LED's	1 No LED	4 No LED's
Outputs	1 (internal signal)	2 N/O, 2 N/O or N/C contacts
Maximum No transmitters	85	85
Frequency	433,92 MHz	433,92 MHz
Weather protection	Intended for mounting Inside a cabinet	IP65
Compatibility	The receivers are compatible with DBR1 transmitters only.	

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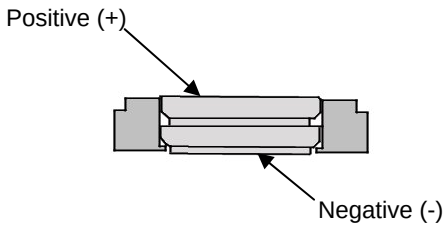
General Specification

The radio control system uses AM-modulation with a frequency of 433,92 MHz. The typical transmitter range is about 50 meters, however this can vary depending on the surroundings and which antenna is used. The receiver has either 1 or 4 output contacts (depending on model) and both units require a supply voltage of 12-24 VDC/VAC. The receivers require an external antenna.

Battery replacement
Every transmitter contains battery that lasts for about 18-24 months depending on usage. As the battery begins to run out there will be two indications: the range will decrease and the transmitter's red LED will weaken.
The 4-button handheld transmitter requires a 12V battery (type 23A), the 2-button handheld transmitter requires 2 No 3V-button batteries (type CR2016), and the 4-button wall-mounted transmitter requires 2 No 3V-button batteries (type CR2025).



Safety instructions

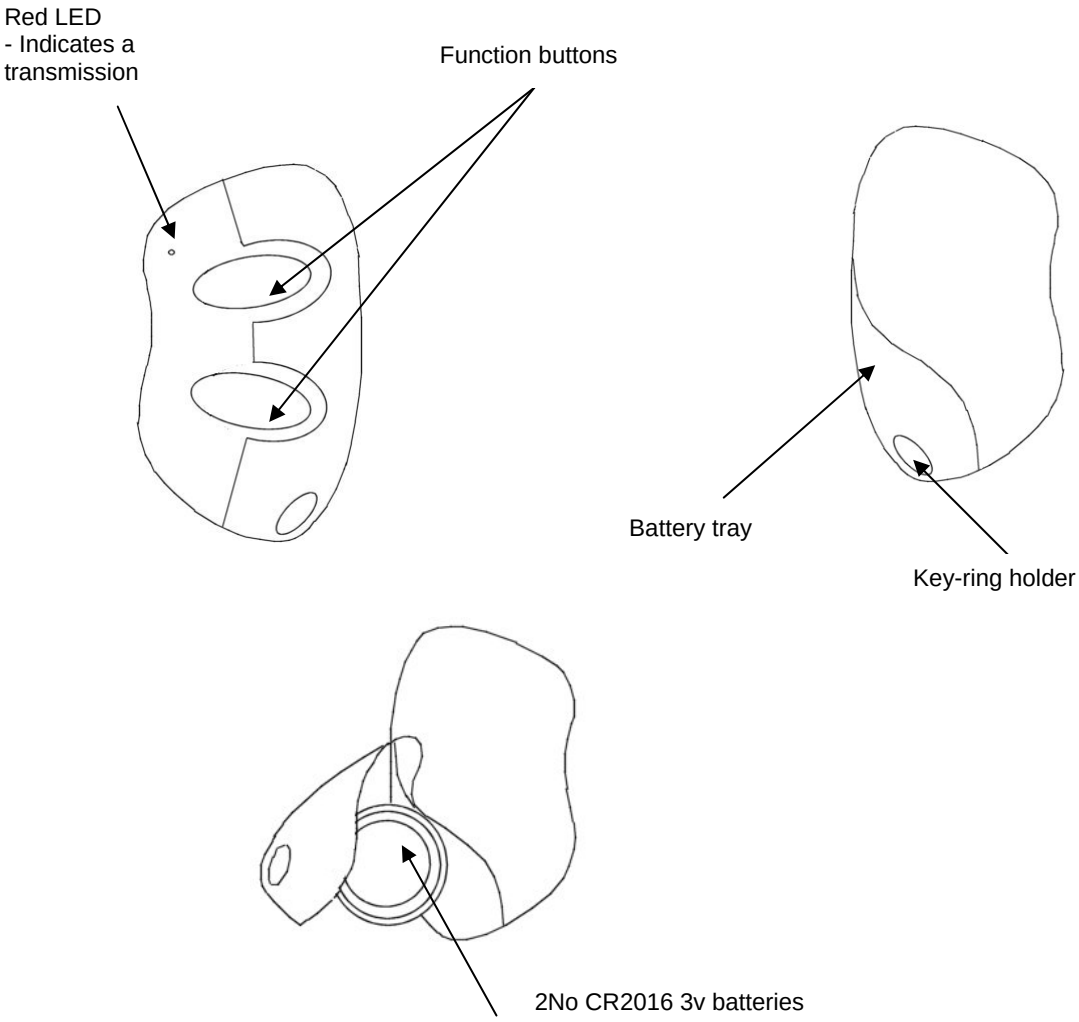
To be read before installation of the radio equipment.
In order for the radio system to function correctly the aerial must be correctly installed:

- The aerial must be mounted as high as possible
- The aerial must be mounted vertically and on a clear line of sight.
- There should be no other aerials or steel-work within the vicinity.

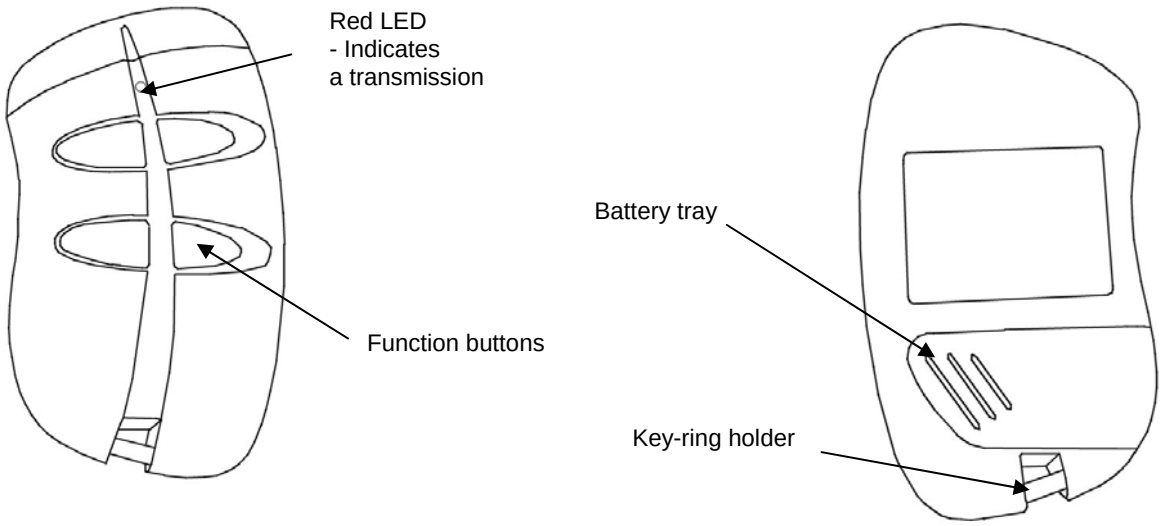
WARNING! Only use the transmitter if you have full control over the door which will be used. The transmitters range can result in an involuntary operation.

Description of the transmitters

- **2 button transmitter**

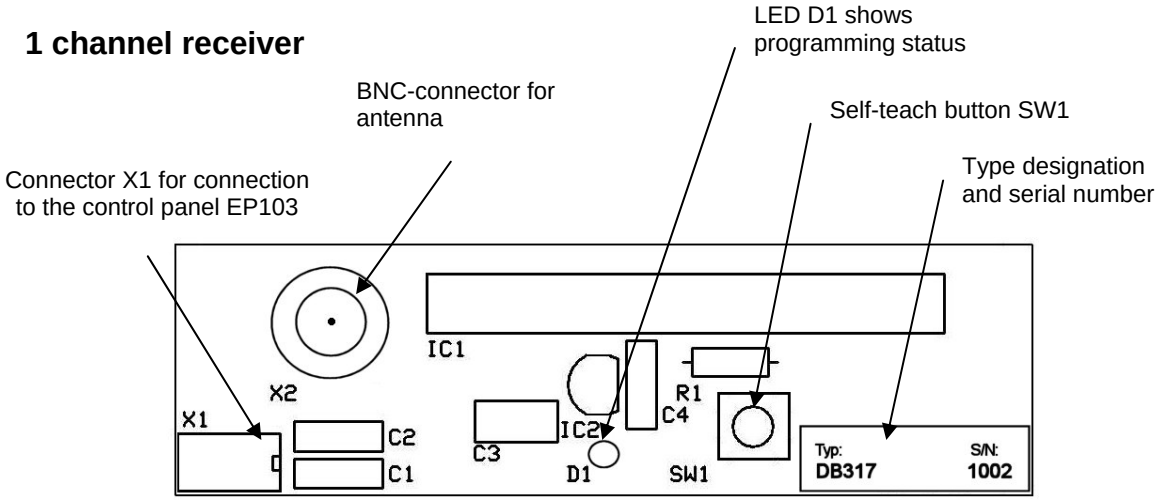


- **4 button transmitter**

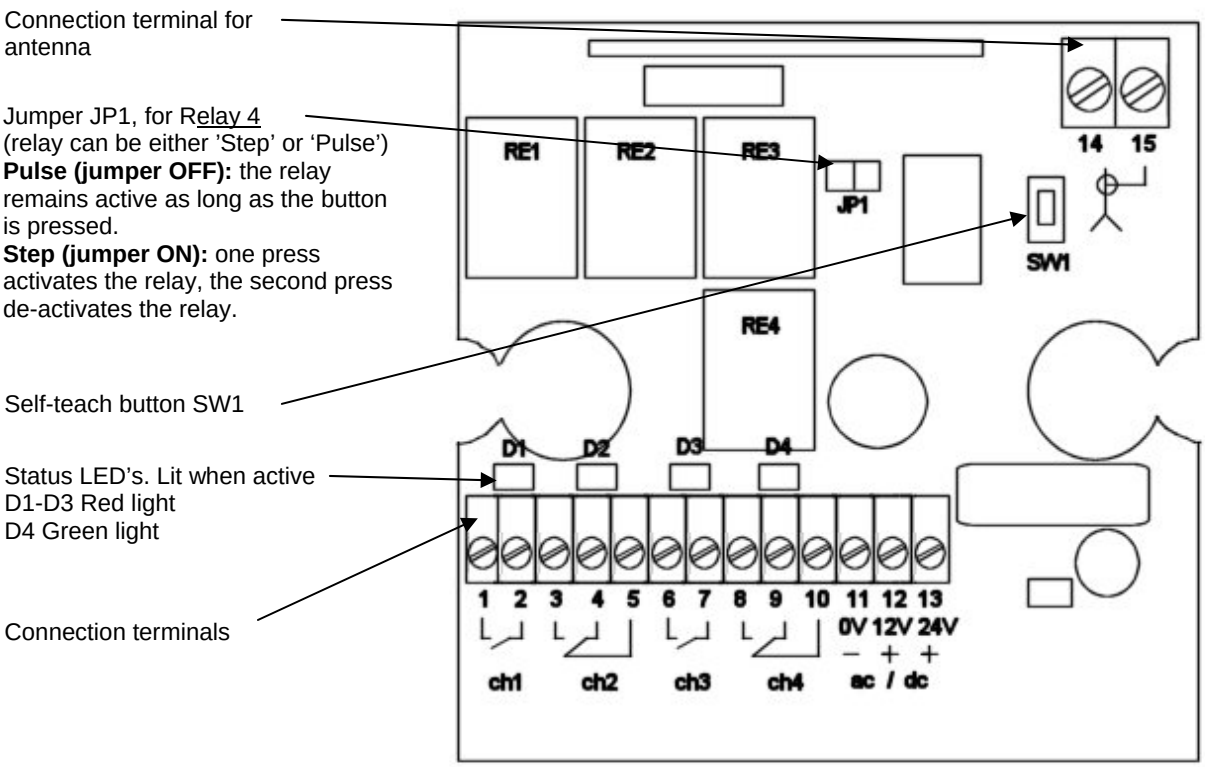


Description of the receivers

- **1 channel receiver**



- **4 channel receiver**



Connection – Numbering of connection terminal

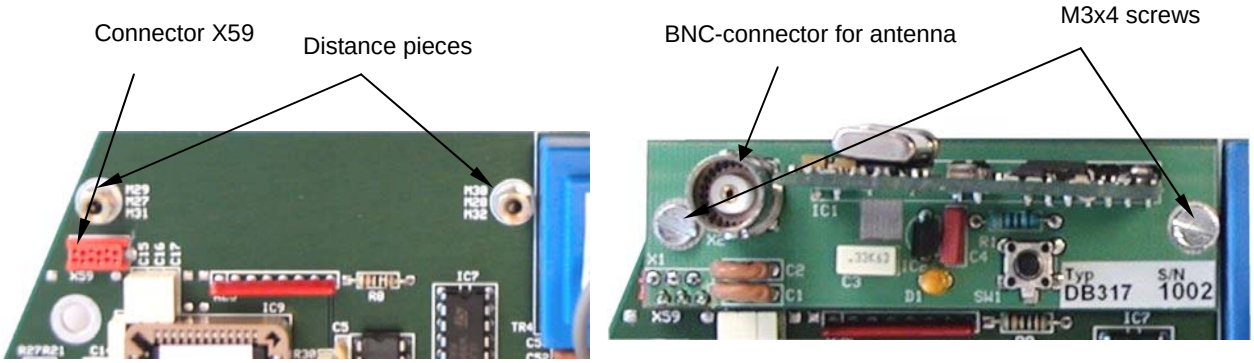
1	Relay 1 N/O	Output 1 Function: N/O
2	Relay 1 Common	
3	Relay 2 N/O	Output 2 Function: N/O or N/C
4	Relay 2 Common	
5	Relay 2 N/C	
6	Relay 3 N/O	Output 2 Function: N/O
7	Relay 3 Common	

8	Relay 4 N/O	Output 4 Function : N/O or /C
9	Relay 4 Common	
10	Relay 4 N/C	
11	0 V	Voltage supply
12	12 VDC/VAC	
13	24 VDC/VAC	
14	Antenna	Antenna connection
15	Antenna, earth	

Mounting the receiver and antenna

1 channel receiver (DB317)

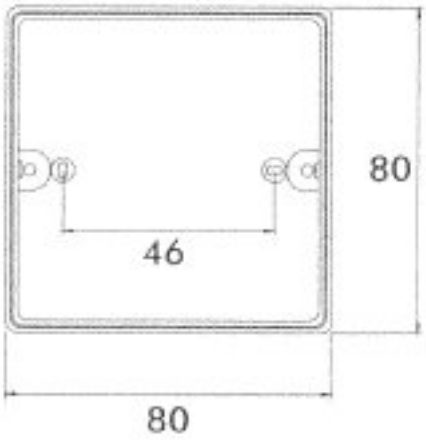
1. Switch off the electrical supply to the control panel EP103.
2. Gently press the connector on the card to the connector on EP103 panel marked X59.
3. Secure the card with two M3x4screws to the distance pieces on EP103 panel.
4. Connect the antenna at the BNC-connector on the card.



4 channel receiver

The receiver has IP65 weather protection; however, it's important that the receiver is mounted correctly.

- Place the receiver with the cable glands facing down.
- As far as possible, protected from the wind and weather.
- Don't mount the receiver close to 230/400VAC cables. It should be mounted at least 10cm from these cables, otherwise the sensitivity may be reduced.
- Avoid mounting the receiver where there is a large change of temperature.



Mounting the antenna

The receiver should be provided with an external antenna. It's important that the antenna is correctly located and the following points observed:

- Place the antenna as high as possible.
- The antenna shall not be placed near any other metal objects such as beams, electrical cables or other antennas.

Commissioning

Transmitters need to be ‘introduced’ to the receiver. Each transmitter has a unique code, this can’t be changed. The receiver ‘learns’ the transmitter code by pressing the self-teach button (SW1) on the receiver. Each setting is confirmed with the LED’s on the receiver. Each receiver will accept up to 85 transmitters.

• 1 channel receiver

Introducing a transmitter to the receiver

1. Press the ‘self-teach’ button (SW1) on the receiver, LED (D1) will light.
2. Press the transmit button on the transmitter, it is possible to program more transmitters as long as the LED is lit.

   - The receiver has now registered the transmitter’s code and the LED on the receiver flashes. When the LED has gone out, repeat the above if more transmitters are to be introduced. Check that the receiver output becomes active when the transmitter button is pressed.

Removing one transmitter button from the system

1. Press the self-teach button on the receiver.
2. Transmit a signal with that specific transmitter button that is being removed.
3. That transmitter button is now removed from the system. Be aware of that if more than one transmitter button has been ‘introduced’ to the receiver will these work anyway.
4. Repeat for any other transmitters that are being removed.

• 4 channel receiver

Introducing a transmitter to the receiver

1. Press the ‘self-teach’ button (SW1) on the receiver, LED (D1) will light.
2. Press the button again to select the output that is being programmed (the appropriate LED is lit above the selected output).
3. Transmit a signal from the transmitter whilst the LED is lit. It is possible to program more transmitters as long as the LED remains lit.

   - The receiver has now registered the transmitter’s code and the LED on the receiver flashes. Repeat the above if more transmitters are to be added.
   - Check that the output actives on a signal; the LED illuminates when the transmitter button is pressed.

Disabling a channel from a transmitter

1. Press the ‘self-teach’ button until the LED is lit.
2. Press the button again to select which channel is to disabled (LED is lit above the chosen output).
3. Transmit a signal with the channel to be disabled. Repeat for any other channel to be disabled.

   - The receiver confirms reception by the two LED’s D3 and D4 flashing twice.

- **Common for both the receivers**

Erase all the transmitters
All the transmitters in the memory can be erased.
1. Press the self-teach button until the LED is lit.
2 a. **(DB317)** Release the button and press again; the LED D1 flashes 3 times.
2 b. **(DBR1-M4-1)** Release the button and press again; LED's D3 and D4 flash 3 times.
3. The memory is now completely empty.

Memory full
If the receiver's memory is full, i.e. 85 transmitters are already programmed into the receiver, LED's D3 and D4 flash 3 times and the programming is cancelled. A transmitter needs to be removed before another can be added.

Service fault finding

Check	Possible cause
The receiver doesn't working when the transmitter button is pressed.	The receiver has a faulty wiring connection. Check the receiver's connections. Wrong voltage supply to the receiver. Check voltage supply to correct connection terminal. If several transmitters are coded to the receiver, check if any other transmitter is working.
The transmitter's red LED doesn't come on when a function button is pressed.	The battery is discharged. Change battery. The transmitter is defective. Contact DAAB Portteknik.
Transmission range is too short.	Faulty battery, change battery. Antenna cables are damaged or incorrectly installed.
The transmitter's red LED is flashing.	Faulty battery, change battery.

For further help or information, please contact DAAB Portteknik.

Accessories

2 button transmitter,
blue
art no. 002610

2 button transmitter,
grey
art no. 002608

2 button transmitter,
red
art no. 002612

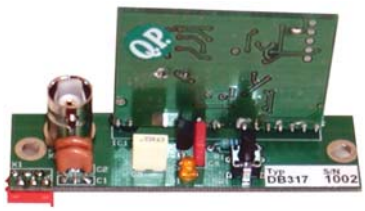
2 button transmitter,
burgundy
art no. 002609

4 button transmitter,
yellow
art no. 002611

Holder for
4 button transmitter
art no. 002663

4 button transmitter for
wall mounting
art no. 002666

Dipole antenna for receiver,
including mounting bracket and
3 meters of coaxial cable
art no. 001572



Radio control receiver
DBR1 type DB317.
1 channel
art no. 002606

Radio control receiver
DBR1-M4.
4 channels
art no. 002665

Battery (23A) for
4 button transmitter.
art no. 002667

Battery (CR2016) for
2 button transmitter.
art no. 002668

Battery (CR2025) for 4 button
transmitter (wall mount.).
art no. 002669